

**CLAIMS**

We claim:

5           1. In a vehicle comprising a first device and a second device and an active network communicatively coupling the first device and the second device, wherein the active network is configured to provide a plurality of communication paths between the first device and the second device, and wherein a communication path of the plurality of communication paths includes a loop.

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          2. The vehicle of claim 1, wherein the active network comprises a plurality of active network elements coupled by connection media.

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          3. The vehicle of claim 2, wherein at least one of the active network elements comprises switches.

          4. The vehicle of claim 2, wherein at least one of the active network elements comprises bridges.

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          5. The vehicle of claim 2, wherein at least one of the active network elements comprises routers.

          6. The vehicle of claim 1, wherein the active network is a packet data network.

7. The vehicle of claim 1, wherein the loop couples a first active network element of the plurality of active network elements to a second active network element of the plurality of active network elements.

5           8. The vehicle of claim 7, wherein the loop has a loop data rate different than a path data rate of the communication paths.

9. The vehicle of claim 7, wherein the loop comprises an active network element.

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10. The vehicle of claim 7, wherein the loop comprises a plurality of active network elements.

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11. The vehicle of claim 1, wherein the loop connects the first device and the second device.

12. The vehicle of claim 1, wherein the active network comprises a multi-drop topology.

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13. The vehicle of claim 1, wherein the active network comprises a ring topology.